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THE GENESEE FARMER.

SATURDAY, NOVEMBER 5, 1836.

Massachusetts Agricultural Associations.

Perhaps, if we except the well known, and we hope long to be continued, respect paid to morals and religion, there is no trait of New England character more deserving of praise, or which should be sooner followed, than the spirit and perseverance with which their societies for the advancement of agriculture are supported. Here is found a common ground on which all the sons of the Pilgrims can unite—where feelings of gratitude to the Bountiful Provider for human wants can be excited and cherished, and sentiments of noble and honorable emulation be encouraged. Nothing tends more to elevate men above the petty dissentions of party—to do away the thousand causeless jealousies that spring up to embitter the springs of social existence—to closer draw the ties thrown around every individual of the great family compact, and bring them to a more perfect union and cordiality of feeling—to awaken new hopes and new aspirations, give enlarged views and correct erroneous theories, than the assemblages of practical farmers, which take place at these anniversaries.

We have before us the reports of the proceedings at two of these meetings, those of the Berkshire and Worcester Agricultural Societies, held on the 5th of October, and notwithstanding the inclemency of the weather, both appear to have passed off with great interest and spirit. Some of the most distinguished men in that state were present, as well as agriculturists of eminence, and other gentlemen from others. The Berkshire Society has long stood in the front rank of similar associations, and its long continued and increasing influence has been productive of incalculable good to the flock covered hills, and the fertile valleys of that romantic region. Through its untiring exertions the culture of winter wheat has been successfully resumed, and hopes are entertained that a sufficient supply of that necessary grain for the use of the inhabitants, may be provided from their own fields. The farmers of Berkshire are noted for their energy and their intelligence, for their care in raising of stock, and their making themselves early acquainted with the best and most effieient modes of agriculture. One fact relating to the farming population of Berkshire is too honorable to them, and too deserving of imitation by farmers in other places, to be passed by unnoticed. The committee on agriculture in their report say—"There were more than sixty applications for agricultural premiums: inquiry was made by the oldest members of the committee of each one—whether in the management of their farms they used ardent spirits? Of the whole number there were but *two* who used this fearful poison."

The meeting at Worcester was held the same days as at Berkshire, and as usual called together many of the public spirited and intelligent farmers of that and other sections of the country. The reports of the different committees show what interest such holidays excite, and the valuable ends they answer. There were two ploughing matches, one with double teams and one with single teams, all of oxen. Eleven double teams and the same number of single ones competed for the prizes, and exhibited both of beautiful oxen, and excellent workmanship in ploughing, specimens of which the Worcester farmers may well be proud. For the prizes offered for working cattle, twenty-one teams were entered, making a grand display of these useful animals. Several milch cows were offered for exhibition, one of which between the 10th and 20th of June averaged 17 quarts of milk per day, and the butter made from the milk in the same time was 17½ lbs.; and another one from the milk of which during the same days 12½ lbs. of butter was made. A number of very fine fat cattle were exhibited, one yoke of which, wholly grass fed, weighed over 2000 lbs. each. A cow was shown by the President of the Society (Gov. Lincoln) which gave 16 quarts of milk per milking, and had just been sold to a gentleman in Virginia for $100. The cow was a full blood Durham. Forty head of neat stock, in addition to the above, were offered for premiums. Forty-eight steers were also on the ground, presenting some most beautiful animals. The number of sheep offered was also greater than at any former show, and of far superior qualities. In addition to all these, the pens of fine looking swine, which did not seem to have been wholly fattened by animal magnetism; the tables in the town hall loaded with rich specimens of butter and cheese; and the immense variety of articles of domestic manufactures—labor saving machines—articles of costly and curious construction, gave unwonted animation and activity to the scene.

We are confident no farmer can attend such exhibitions without returning to his home better satisfied with himself, with better and more kindly feelings towards the world, more fully impressed with the important and honorable nature of his business, and fully resolved to make new efforts in the career of honest and useful industry. To our agricultural brethren at the east we can only say—go on and prosper!—acquire knowledge, acquire experience, cultivate your own resources, and your hills will become surer sources of wealth than the prairies of a western wilderness. Other and similar institutions in that section of the country will hold their meetings in due season, and contribute their impulse to the return of a better state of feeling and prosperity to the New England Farmers. Would that the time might again return to New York, when each county should have its agricultural exhibition, and the farmers of the Empire state be awakened to the advantages and the capabilities of their situation. We have not an objection to an agricultural school, unless the bounty of the state should here find a resting place; but in actual importance to the real tiller of the soil, the multitude of small farmers, who make up such a large majority of the whole body, we have believed, and still believe, that the same money applied to the resuscitation and re-establishment under an improved organization of the county agricultural societies, would be infinitely more beneficial. The fact has been clearly established, that if farmers will not attend to their own interest, and the advocacy of their own claims, they can expect no one else to do it for them. c,

Save Seed Corn.

Scarcely a year passes in which farmers do not suffer a great loss from want of attention to this particular; and if such is the effect in favorable years, we must expect that, unless great pains is taken, the seed corn of next spring will be of the most inferior quality. The corn of this year at the best is scarcely ripened sufficient to vegetate; the very unfavorable cold wet weather of the fall has caused it to retain much moisture in the cob and keep the kernel soft; and unless unusual care is taken to select the best and earliest ripened ears, and keep them in such situations that they will not heat, we may expect to hear frequent complaints that the corn planted next year don't grow. Seed corn should always be selected on the stalk, and before gathering, as in that way the earliest ears can be secured; where this course is not taken, at husking good bright sound ears should be chosen, the husks mostly taken off, and the ears by the remaining ones braided into strings, as onions are bunched, and hung in some dry secure place for use. The custom of selecting seed corn from the crib or corn-barn when it is wanted is a bad one. Corn is rarely put up so perfectly dry and sound as not to heat considerably when packed in large masses, and the injury thus produced, if carried to any considerable extent, is always fatal to seed corn. Three years since we had a piece of corn of the best kind, yielding 70 or 80 bushels to the acre, and so sound that those who gathered it imagined there was not an ear in the field that would not grow. The corn was taken to the barn to be husked, and at husking the best ears were selected for seed, and thrown into a large tub with their husks upon them to be braided up. They were overlooked for some weeks, when they were braided, and the next spring the corn was used for seed. Not one kernel in ten grew. On examining the corn left, it was found that while lying in the tub, wholly excluded from the circulation of the air, it had heat to such a degree as to leave the kernel, when it dried, shriveled on the surface, and bearing on it the most incontestible marks of the process through which it had passed. If seed of any kind is defective, though it may retain life enough to grow,

the vegetation will be sickly and backward, wholly unlike the healthy and vigorous shoots put out by perfect seeds. Farmers should remember this fact when choosing their seeds, whatever may be their kind or variety, for with bad seed they have no right to expect a good crop. a.

Beet Sugar.

We have been requested to give an account of the extraction of sugar from beets. We can do no better than to copy what Chaptal says on the subject, with some abridgement. It is said that some of the processes have been simplified and improved since he wrote.--[*Vermont Chron.*

On the Preparation of the Roots.

Before subjecting the beets to the teeth of the rasp, they must be carefully freed from all the earth which they bring with them from the fields. The necks, and any portion which has begun to decay, must be cut off, and the radicles removed from the surface.

On the method of Rasping the Beet Root.

The beets, when well cleansed, are submitted to the action of a rasp, by which their fibrous substance is reduced to a pulp. The rasp is worked either by a horse, or by a stream of water. The rapidity of its motion should be equal to four hundred revolutions upon its axis in a minute.

The rasps used by me are sheet-iron cylinders, fifteen inches in length, and twenty-four in diameter, having their surfaces furnished with ninety iron plates armed with saw teeth and fixed by screws perpendicularly to the axis of the cylinder, and throughout the whole length of it.

The operation of rasping must be conducted expeditiously, otherwise the pulp begins to turn brown, fermentation takes place, and the extraction of the sugar is rendered difficult.

On the Extraction of the Juice.

As fast as the pulp falls into the box placed under the rasps, it is put into small bags made of very strong cloth woven of pack-thread. These bags are placed upon the plate of a good iron screw press, and submitted to a strong pressure. The screws are after a time to be loosened, the places of the sacks changed, the pulp which they contain shaken over, and the whole again submitted to the action of the screw.

The pressure should be continued till the pulp will not moisten the hand when strongly squeezed in it. The juice which flows from the press is carried by leaden pipes into the boiler, where it undergoes the first operation. Of this I shall speak immediately.

If an iron screw press is not to be had, a wine press, or a cylinder press, will answer the purpose.

The operation of the press should be completed nearly at the same time with that of the rasp. Every thing that has been moistened with the juice, must then be washed so as to be ready for a new operation. The utmost cleanliness must be preserved, otherwise the rasps will become rusty, the juice will change, and the boiling will be rendered difficult.

On the Purification of the Juice.

As soon as the boiler which receives the juice is one third full, the fire is kindled; and, as the juice continues to flow, the heat is raised to 65 deg. of Reaumur, (=180 3-4 deg. of Fahrenheit.) While the juice is heating, some milk of lime is prepared by pouring gradually some warm water into a bucket containing ten pounds of lime.

As soon as all the juice has passed into the boiler, and become heated to a degree mentioned in the last paragraph, the milk of lime is thrown into it, the greatest care being taken to stir and mix them well together; after which the temperature may be raised to the boiling point. As soon as the first bubble makes its appearance through the thick, glutinous scum which rises upon the top of the liquor, the fire is immediately extinguished by throwing a pailful of water into the fire-place. The scum thickens, dries, and hardens by rest. The juice becomes clear, and takes a light yellow hue. When there can no longer be seen in it particles either of lime or mucelage, the scum is removed with a skimmer and thrown into a bucket, in order that the juice which it contains may be expressed. The upper stop-cock is then opened, and the liquor is suffered to flow into the evaporating boiler.

The juice does not become clear in less than an hour, and evaporation ought not to be commenced till it is perfectly limpid.

As soon as all the liquor above the level of the upper stop-cock has passed out, the second stop-cock is turned; and if the liquor flowing through that be found clear, it is mixed with the first portion. If, on the contrary, it appears cloudy, the stop-cock is again closed to give it time to settle, and it is not made use of till towards the termination of the evaporation.

The deposit which is formed at the bottom of the boiler, renders the last portion of the juice turbid. But as soon as this is seen to be the case, that which remains is drawn off into the bucket containing the scum.

The deposit which is formed at the bottom of the boiler, and this scum, are expressed by means of a lever press of very simple and cheap construction, and which is very easily worked.

The most difficult operation to be performed is that of purifying juice; and if this be not thoroughly done, the processes of evaporation and graining are long and troublesome; the juice swells and bubbles up in the boiler, and the sugar chrystalizes imperfectly and remains mixed with molasses. The lime which is thrown in to clarify the juice, does not always rise to the top with the scum, by a prolonged period of rest in the depuratory boiler; neither is it always precipitated. It sometimes happens, that, notwithstanding all the care that can be taken, the liquor remains cloudy; and in such cases it is always in vain to look for good results.

On the Concentration or Evaporation of the Purified Juice.

As soon as the bottom of the evaporating vessel is covered with juice, the fire is kindled, and ebullition is produced as speedily as possible,—the juice which continues to flow from the clarifying boiler supplying the loss occasioned by evaporation.

When the boiling juice marks 5 or 6 deg. (=1,036 to 1,044) of concentration, a portion of animal charcoal is thrown in, and this is continued, the quantity being gradually increased till the juice is concentrated to 20 deg. (=1,161.) Sixty pounds of charcoal are used in this manner, for a quantity of juice equal to from 422 to 475 gallons.

After having brought the liquor to the twentieth degree of concentration, the boiling is continued till the syrup marks 27 or 28 deg. of the hydrometer, (=specific gravity of 1,321 to 1,242.) The sirup, being mixed with animal charcoal, requires to be filtrated.

I place a large willow basket over the boiler; into the basket I put a coarse bag of the same diameter, but about two feet deeper. I pour the thick sirup into the bag; for some minutes filtration goes on very well, but as the liquor grows thick in consequence of its cooling, filtration slackens and at length stops; as soon as I perceive this, I turn the borders of the sack into the basket, and upon them place a wooden trencher, which I gradually load with cast iron weights till the necessary pressure is produced; filtration is by this means completed in two or three hours.

The conversion of the juice into sirup should be done as speedily as possible; for when evaporation is slow the liquor becomes pasty, as part of the sugar is decomposed and passes to the state of molasses, and the difficulty of boiling is increased. It is necessary then that evaporation should be carried on with violent boiling, and for this reason the boilers made use of should be broad and shallow, so as not to heat only layers of the liquor, and in order that ebullition may take place at once through the whole mass of the liquid; the furnaces likewise should be so built, as to heat the furnaces equally. The evaporation of 422 gallons should be completed in four hours.

On Boiling the Sirup.

The sirups prepared over night are the next day dried to extract the sugar from them.

The products of two operations upon 5000 beets are mixed together in a boiler, whence they are taken to form four successive dryings or boilings. One fourth part of these sirups is thrown into a round boiler, forty inches in diameter and twenty in depth; under this a fire is kindled; the liquid is made to boil, and the boiling continued till the operation is ended.

The process is judged to be going on well if the liquor exhibits the following symptoms.

1. When the sirup breaks short, and the bubbles upon returning into it produce a sensible sound.

2. When a dry sound like that produced by striking silk, is returned from the surface of the sirup, when it is struck with a skimmer.

3. When the bubbles of foam disappear immediately upon being pressed with a spoon. The boiling is always perfect when the interior surface of the boiler is found, after the operation is ended, to retain no trace of blackness

The drying is ended when the boiling sirup marks 44 or 45 deg. (=specific gravity of 1,440 to 1,451.) The time for removing the sirup from the boiler may be known by the following signs.

1. Plunge a skimmer into the boiling sirup, and upon withdrawing it pass the thumb of the right hand over its surface; mold the sirup which adheres to the thumb between that and the fore finger, till the temperature be the same as that of the skin; then separate the thumb and finger suddenly; if the boiling be not completed, no thread will be formed between the two; if there be a filament, the boiling is well advanced; and the process is completed as soon as the filament breaks short, and the upper part, having the semi-transparency of horn, curls itself into a spiral. This manner of trying the sirup is known by the name *proving*.

2. The second mode of judging of the completion of the process, is by observing the time when the sirup ceases to moisten the sides of the boiler, and then blowing forcibly into a skimmer which has just been emersed in it; if bubbles escape through the holes of the skimmer which ascend into the air in the same manner as soap bubbles do, the liquor is considered to be sufficiently boiled; the fire is therefore immediately extinguished, and the sirup is in a few minutes after conveyed to a great copper boiler, which is called the *cooler*.

The cooler is placed in an apartment of the manufactory near the boiler; its capacity should be such as to allow of its receiving the product of the four successive boilings. The cooling which the sirup experiences in this vessel, quickly produces crystalization; the crystals form first at the bottom, where they collect in a thick bed, having however no union of particles. Gradually the sides become covered with solid crystals, and at length there is formed upon the surface a crust of sugar which thickens insensibly. At this time the contents of the cooler are taken out to fill the molds in which the process of crystalization is to be completed.

The contents of the cooler are first thoroughly stirred and mixed, and then thrown gradually into the molds, a portion being put into each in turn, so as to fill them all equally; an interval of an inch is left between the surface of the sirup and the top of the mold.

Crystalization is hastened by carrying the molds as soon as they are full into the coolest apartment of the manufactory.

Cooling causes the formation of crystals upon the sides of the molds and the surface of the liquor. As soon as this crust of crystals has acquired some degree of consistency, it must be broken with a wooden spatula, and the whole contents of the mold carefully stirred so as to collect in the center the crystals that have formed upon the sides. When this has been done the crystalization is allowed to go on undisturbed.

Three days are more than enough for the formation of all the crystals; the plugs that close the

points of the molds are then taken out, and the molds are placed in earthern pots that the molasses may flow from them.

From the United States Gazette.

Beet Sugar.

To J. R. Chandler, Esq —Sir—Perceiving by the many applications made to me for information respecting Beet Sugar, that not only a very general interest prevails on the subject, but also some very erroneous views, I take leave, through your wide circulating paper, to puplish a few of my views thereon, being the conclusions I have come to, after numerous experiments, as well as from information I have obtained from the most scientific French authorities.

1. An establishment will not clear its expense unless it be calculated to manufacture at least from two to five hundred pounds of sugar per day, so that the idea of individuals in this country manufacturing profitably for private consumption is preposterous; their sugar would stand them, including labor, a dollar per pound.

2. The greatest advantage will be derived from steam power, which will accomplish three objects at least, viz: First, the rasping of the beets; secondly, the reducing of the liquor "in vacuo;" and thirdly, the boiling of the syrup without the risk of burning it, of which the beet syrup is in much greater danger than the cane syrup; the proof of the former being some degrees higher than that of the latter.

3. The juice of the beet decomposes in the summer in this country in less than two hours. I have known the viscid fermentation commence in twenty minutes. When this once occurs, sugar can never be obtained from it; in a large establishment in this country, it must be prevented by chemical agents.

4. Not only must the acid be neutralized, but the mucilage must be chemically coagulated, the cerate decomposed, and the malate of lime extracted, or the crystalizing will be rendered extremely difficult, if not totally impracticable in many cases, and good sugar will never be made.

5. I am persuaded the refining process can be profitably united to the manufacture of the raw sugar.

6. The profits are incredibly increased in proportion to the extensiveness of the establishment, but no one ought to engage in this business who has not *mind*, as well as capital.

7. One half of the manufacturing expenses will be saved, by a scientific arrangement of the apparatus, so as to dispense with, as much as possible, manual labor.

8. Understanding from various farmers within from ten to twenty miles of this city, that they are perfectly content with about twenty or twenty-five dollars per acre's produce, and as each acre ought to yield on an average 40,000 lbs. of beets, which will produce 2,400 lbs. of sugar, I have made the following estimate. Supposing the apparatus to be capable of working only about 100 lbs. of sugar per day, it would take twenty-four days to manufacture 2,400 lbs. of sugar.

EXPENSES.

One acre of beets, (40,000 lbs.)	$25 00
Two men for 24 days,	48 00
Two boys for do.	22 00
Fire and rent, &c.	40 00
Total,	$135 00

RECEIPTS.

Quantity of sugar from the acre of beets, would be 2,400 lbs., which at 10 cents per lb would be	$240 00
Beet cake and molasses, &c.	20 00
Total,	$260 00
Expenses,	135 00
Profits,	$125 00

By this general statement it will be perceived that there will be nearly cent per cent profit, but then the interest of the capital sunk in the purchase of machinery is not included. On the other hand, the two men could work twice or four times as much, and the apparatus for the increased quantity cost very little more.

If you think these remarks worth publishing, you are welcome to them, and I am, sir, your very obedient servant. W. W. Sleigh.

Hamilton Village, corner of Cedar Lane, September 30, 1836.

Make the most of your Food for Cattle.

If the husks and bottoms of your Indian corn, when stowed away for winter, are sprinkled with a strong solution of salt in water, taking care not to use such a quantity of the liquid as to cause mold, and when dealt out are cut fine with a straw cutter, they will make excellent fodder, and be much more valuable than if given to your cattle without preparation. Not only the husks, stalks, and bottoms of Indian corn will be rendered of much greater use by cutting, but hay will be worth so much more for cutting or chaffing as to make it well worth the while to be at the trouble and expense of the operation.

Judge Peters, formerly President of the Pennsylvania Agricultural Society, observed that "one bushel of chaffed hay at a mess, given in a trough, three times in twenty-four hours is sufficient for a horse, ox or cow. A bushel of chaffed hay, lightly pressed, weighs five to five and a half lbs. A horse or horned beast thrives more on 15 lbs. thus given than on 24 or 25 lbs. (including waste) as commonly expended in the manner of feeding in racks, to which troughs, properly constructed, are preferable.

Feeding your stock by weight and measure of food. will not only save your provender, by its orderly distribution, but frequently save the lives of animals, too often starved by niggardliness, or gorged and injured by profusion, if it be true, as it is, that "the master's eye prevents the horse from being pampered, bloated, foundered, and finally wind broken and blind."

When there is a white frost on the grass, says the Genesee Farmer, keep your cattle in the yard, and give them a little dry fodder. When the frost is melted off, turn them out and they will do well.

When young animals are pinched for food at an early part of their growth, or fed with such as is not of sufficiently good quality, they never thrive so well nor make so good stock afterwards. It is observed in Young's Farmer's Calendar, that "in the winter the yearlings should be fed with hay and roots, either turneps, carrots, potatoes, mangel wurtzel, or ruta baga, and they should be thoroughly fed, and kept perfectly clean by means of litter. At this age it is matter of great consequnce to keep such young cattle as well as possible; for the contrary practice will stop their growth, which cannot be recovered by the best summer food. It is not right to keep yearling calves and two years old together, because, in general, the younger catttle are the better they should be fed."

When a farmer is apprehensive he has too much stock for his fodder, it is best not to stint them in their allowance as much in the fore part as in the latter part of winter; for cattle are more liable to be pinched with cold in December and January, than afterwards, when they become habituated to rigorous weather. Advantage may also be made of browsing more in the latter than the fore part of winter, as the buds begin to swell, and the twigs have more sap in them than in the early part of the season.

If the farmer proposes to feed his cattle with potatoes ar other roots, it will be best to give them but a small quantity at first, increasing by degrees as they become accustomed to that sort of food. It will be better to give them a little every day than a large quantity once in three or four days or a week.

Some kinds of cattle are said to be greater feeders than other breeds, and it is affirmed that the difference of size makes less difference with regard to quantity of food consumed by cattle than has been generally supposed. A celebrated Treatise on British Cattle, of which we gave some notices, page 110 of the present volume of the New England Farmer, contains the following remarks on this subject:

"That there is a great difference in the quantity of food consumed by different breeds of cattle, cannot be doubted; and that the short horns occupy the highest rank among the consumers of food is evident enough; but we never could be persuaded that the difference of size in the breed made any material difference in the appetite or the food consumed. When they stand side by side in the stall or house, and experience has taught us the proper average quantity of food, the little one eats her share, and the larger one seldom eats more, even when it is put before her. There are occasional differences in the consumption of food by different animals, but these arise far oftener from constitution, or from some unknown cause, than from difference of size. Experience does, however, prove beyond the possibility of doubt, that the large cattle, the breed and other circumstances being the same, yield the greatest quantity of milk."—*New England Farmer.*

Skinless Oats.

The following communication for the New England Farmer, by Mr. Wm. S. Holmes, of Boston, we understand was received by him from a friend in Cape Breton.

Receipt for Raising the Chinese Oats.—When the land is prepared for sowing, sow twelve quarts to the acre. They are slow at first in vegetation, but will produce from twenty-five to thirty spires from one seed if the ground is good, and there is room for the shoots to spread. When fit for reaping, the top turns yellow, and the stalk is green, which makes good fodder for horses and horned cattle, and may be cut at the rate of three to four tons to the acre. The average weight of these oats is fifty four pounds to the bushel.

Receipt for Cooking the China or Skinless Oats.—Let them be washed in water; and afterwards put them in a kettle to boil, strain off the water, and add as much fresh water as will boil them, so as to have them open or expanded like rice in boiling, say four hours. It makes an excellent repast to eat with a little butter and sugar.

By the Editor of the New England Farmer.—Mr. J. Brown of New York, favored us with some notices of the Skinless Oats, which were published in the N. E. Farmer, vol. xii. p. 417. The article referred to contains a quotation from a London periodical, by which it appears that at a meeting in England of the Warwickshire Agricultural Society, a specimen of the *Avenaiva farina*, or Skinless Oat, was produced by the Rev. Mr. Knott, which had been plucked that morning out of a piece of ground belonging to that gentleman at Warmpleighton. The seed was originally imported from Shantag, a remote district in China, and was quite unknown to Europeans till about the year 1831. The advantages which this extraordinary and very valuable grain possesses over all other kinds of oats are numerous. When threshed from the sheaf it is exactly like oat meal, and is fit for immediate use for culinary purposes, and every other sort for which oat meal is consumed, the grain being perfectly free from every particle of rind or husk. The flavor is delicious, and it contains much more farinaceous matter. There is of course a considerable saving of oats and the expense of kiln drying, &c. and one peck contains more nutricious food for a horse than three pecks of common oats. The produce is astonishing, the average being twenty-six barrels of 14 stone to the Irish acre, the exact quantity grown by Mr. Drenzy on one acre. It was not sown till the 4th of May, and was reaped early in the following August. It is remarkably hardy, and well adapted to the climate of England."

Limington Silk.—We were presented a few days since with a skein of *White Sewing Silk*, a very good article, manufactured by Arthur McArthur, Esq. of Limington, in this county. Mr. McArthur we learn has raised a sufficient quantity this season to amount to fifteen dollars. —*Kennebec Gaz.*

COMMUNICATIONS.

I've no Time Now.

BY OBSERVER.

These words, so undpretending and harmless in themselves, are made the cloak of more agricultural transgressions, in farming pecadilloes, than any uninterested man would dream of including under the broadest mantle of charity. In effect there is but little difference between the man who has no time now, and the man who intends to do every thing to-morrow; both are always driven by their work—both never imagine that with the farmer every day and every season of the year brings its appropriate business and cares—and both forget that a single postponement of either, infallibly deranges the whole economy of the farm, and puts a man to a great deal of trouble to get them to rights again.

And why, my dear sir, have you not as much time now as you will have to-morrow or next day? The work which it is necessary should be done to-day, is something which you knew or should have known must be done. If you do not manage your farm at what is called haphazard, you must be looking ahead, and forethought is too valuable an attribute of man to be overlooked or perverted. If you have sown your fields, there is a reasonable prospect that you will be called to reap; and if you have flocks and herds, you certainly know they require food, and experience has shown about the quantity necessary.

In nearly every neighborhood there are more or less of these men, who in transacting their farming business are always complaining they have no time now, and find in the plea an opiate for the most glaring omissions and malpractice. Suppose we sketch the history of one of these men—it may serve to warn, it certainly ought to instruct. In the spring of the year there are many things that require to be performed, in order that the farming of the year may not be interrupted and hindered. Tools are to be repaired and provided; but one farmer says he has no time for these things, and the implements of agriculture are for the year either imperfect or entirely wanting. Every farmer who manages right is aware of the necessity of having all his fences put in order as soon as the snow leaves the ground, that his animals may not only be confined to their proper fields, but that fallen down fences may not prove a temptation to unruly habits. The farmer who has no time now, sees his fences blown down by the storms of winter; a rail off here and another one there; posts, bars and gates rendered useless in giving safety to his enclosures; he sees his young wheat just recovering from the effects of frost, and beginning to throw out the green shoots, eaten off by his sheep or trodden into the earth by his cattle, and he knows all is wrong; yet he repeats to himself that he has no time, and such is the effect of repetition, he at last more than half believes that such is the fact.

As the season of planting and other spring work comes on, the injurious effects of this maxim become every day more and more apparent. Our climate is such, and our summers are so short, that what a man intends to do in the spring of the year must be done quickly or not at all. His planting and his sowing must be done the earliest day the weather and state of the earth will admit. A day now is invaluable, and the man who pleads he has no time now to get his lands ready or put in his seed, or when he is ready puts it off till to-morrow, may, nine times out of ten, so far as that crop is concerned, lie abed the rest of the year; the time is gone by that any thing can be done with profit, or a reasonabe hope of success.

In traveling about the country, there is generally little difficulty in distinguishing the premises of the man who has no time, from his who, by prudent foresight and proper economy of time, has always plenty of that article at his disposal. The same fatality pervades every department of the farm. Look at his orchard, and the little, bitter, hard, sour, native fruit, furnishes ample security against all depredation, as well as hope of profit from the sale or use of apples. The man knows his fruit is miserable, but as for grafting, he has no time now. The varieties of fruit which form not only an agreeable succession in the same kinds, but with one another, he has heard of, and he approves such a circle of good things well, still he has no time now to devote to their introduction, and he wonders how his neighbor, who has as large a farm as his, keeps as much stock, and raises more grain, without employing more help than he himself does, can find time for such pursuits.

The animals of the man who has no time, furnish a pretty sure index to the character of their owner. Colts, calves and pigs, all have the same stamp—all indicate a man who has no time to pay attention to the procuring superior animals for breeding, and who of course makes use of the first that present themselves. The consequence of such a method may be easily anticipated. His colts are worthless, and after keeping them three or four years he is glad to get rid of them at any rate. His hogs by continual squealing for food, acquire snouts that defy description, and bodies that baffle all attempts at conversion into pork. His cows scarcely produce milk and butter enough for the family, and he is compelled to suffer a loss of twenty-five per cent. on each steer or heifer he offers for sale. His sheep are worse still, both as regards fleece and carcass; and as he has no time to pay attention to his stock when they most require it, his annual losses are sufficient to destroy what little profit might otherwise have accrued.

The man who has no time, suffers the most in his farming business, as fall and winter comes on, and finds him unprepared for their reception. Instead of keeping ahead of time in the fore part of the season, he suffered himself to be passed, and has since nearly run himself to death in the effort to overtake, but in vain. His corn has large contributions laid upon it by the squirrels, and every flock of blackbirds or crows, in their autumnal migration, spend one night in feasting upon it. His potatoes after they are ripe lie in the ground till the late rains injure them materially, or the frost spoils them entirely; and during the winter he must either purchase this necessary part of subsistence, or he and his family consume that wretched article, a frost-bitten potatoe. Perhaps by great good luck he gets his potatoes, turneps, and cabbages, into the cellar in season, and before the frost touches them. Cold weather however comes on, and his wife gently hints to him, that there is danger of "the cellar's freezing, and the necessity of having it banked up and secured. "I've no time now," he replies, and he finds none till all is lost, and that by not having two hours' time.

The men who have no time, fared hard in the deep snow of last winter for the want of wood, a supply of which they had no time to secure in the fall or early part of winter; and if they alone had suffered it would have been no great matter. But their wives and families felt the evil most severely, and it is to be hoped the lesson these men then received will not be forgotten at the commencement of the coming cold months.

To enumerate the evils which never having time, when most wanted, brings upon him, is impossible; and worst of all, his reformation is nearly hopeless, since men of this class are the very ones who think books and agricultural journals are useless, as they never get time to read. I knew one of these men, who lived in a house, the roof of which in a rain leaked like a sieve, destroying furniture, clothing, &c. His wife entreated him to apply a remedy. "Wife," said he in reply, "you surely are not so unreasonable as to expect me to go out in this rain to put on a new roof?" "No, but when it don't rain." "Why, then my dear, there is no necessity for doing it, and besides I have no time."

OBSERVER.

Apple Molasses.

BY TRY AND SEE.

Brother farmers, will you listen to me a few minutes, while I tell you how to provide yourself with a first rate article, and one of prime necessity. You are probably in something of a haste, though I hope you have your potatoes dug and safe in your cellar, for there are many things a farmer has to do to be ready for winter. It is just about election time also, and every farmer should manage so as to be able to drop in at the poll and give his vote for a good man and true; but do not do, as many will, make the privilege of voting an excuse for spending a whole day at the tavern, imbibing "wet damnation."

If you are a married man, as I hope you are, for no other one has consistent claim to the character of a good citizen, you know, or if you do not, your wife does, that it costs no trifling sum to provide sweetening for the family, while there is no possibility of living without it; and experience has fully shown me, that for many of the purposes of domestic cookery, apple molasses is far preferable to West India, while it is at the same time much cheaper.

I make little cider; my apples are worth more fed to my hogs than for cider; but I make a practice of selecting my best sweet apples, those that furnish the richest, heaviest liquor, and making a cheese from them, using the cider thus obtained for making apple or quince preserves, boiling down for molasses, and keeping two or three barrels for drink, or ultimate conversion into vinegar. When new from the press, and before fermentation commences, that which I intend for boiling is brought to the house, and boiled in brass to the proper consistence; taking care not to burn it, as that gives the molasses a disagreeable

flavor, and taking off all the scum that rises during the process. The quantity to be boiled, or the number of barrels of cider required to make one of molasses, will depend greatly on the kind of apples used, and the richness of the new liquor. Four, or four and a half, are generally sufficient, but when care is not used in making the selection of apples, five barrels may sometimes be necessary; but let it take more or less, enough must be used to make the molasses, when cold, as thick as the best West India. When boiled sufficiently, it should be turned into vessels to cool, and from them transferred to a new sweet barrel, put into a cool cellar, where it will keep without trouble, and be ready for use at all times.

Molasses made in this way will be pure, and possess a vinous or rather brandied flavor, which makes it far superior to the West India for mince, apple, or tart pies, though where the apples used are very sour, a small quantity of imported molasses may be advantageously used. It is also excellent for making beer in the summer, giving it a briskness and flavor which common molasses will not; in short, there are but few uses to which molasses is applied in which it will not be found equal or superior to the other. Its cheapness should also be a decided recommendation with the farmer. The cider from which I manufacture my molasses is worth at the press a dollar a barrel, and it is worth a dollar to reduce it to molasses, thus making the cost of a barrel of molasses, allowing four and a half barrels of cider to be used, $5,50. The price of common molasses will average about 50 cents a gallon, or sixteen dollars a barrel, making a saving to the farmer in the use of apple molasses of about ten dollars per barrel. TRY AND SEE.

Hessian Fly and Wheat Worm.

BY A. B.

MR. TUCKER—It appears to me that our farming brethren, the agriculturists of the middle and southern states, in their communications in the journals of the day, on the subject of these insects, labor under some degree of mistake or mystification in the matter, and wherever the error may be, it is very desirable that it should be corrected. The question is this: are these insects, the Hessian fly and the wheat worm, one and the same, only differing as appearing in the different stages of their existence, or are they two insects, running their entire circle, and committing their ravages distinct from each other? Writers in the Baltimore Republican, and the Philadelphia Gazette, seem to take the ground that the Hessian fly, and the worm that has committed such ravages in the north, are the same; and in a late number of the Cultivator, Mr. Kinzer of Lancaster, Pa., has given a paper which inclines to the same ground.

It is of but little consequence to the farmer what insects are called by entomologists, but it is important that they should not be kept distinct, if the same, or confounded with each other if really separate. That our Hessian fly is the *Cecydomia destructor*, is generally admitted, but whether the worm is produced by this fly, the *Cecydomia tritici* of Europe, or by another and similar species, a native of this country, does not appear to be so well determined.

From the language of these southern writers it would seem doubtful whether they were really acquainted with our wheat worm, or the one which injures the berry alone. They talk of the egg being deposited on the kernel, and then when sown producing the larvæ at the root of the wheat stalk, which produces the fly. On the contrary, the egg of the wheat worm is deposited in or on the kernel while in the milk, speedily produces a worm, and this worm lives on the wheat berry. If the egg of the Hessian fly is deposited on the wheat, there is no proof that it is ever hatched till sown; these writers seem to have overlooked this point entirely. Their insect does not injure the berry in the least, except by their action on the wheat stalk near the root after their transformation from the egg to larvæ. The *worm* does not touch the stalk of the wheat at all, it is never found near the root, its sole business is with the berry, and it is never found except on or in that.

I have paid some attention to both these insects, the fly and the worm, and consider them as decidedly distinct in their habits and modes of destroying wheat, their times and methods of transformation;—the fly is the modern *Cecydomia destructor* without doubt; the worm is *probably* produced by the *Cecydomia tritici*, or a similar insect; that they are the same, I consider impossible. Farmers want facts—they want observation—give us these, and the truth will at last be elicited. A. B.

Diseases of Sheep.

The great losses which wool growers frequently sustain in consequence of the sickness and death of large numbers of their flocks, has induced us to compile from a rare and valuable English work a synopsis of the diseases to which sheep are liable, together with the symptoms by which they are known and the treatment by which they are remedied. The causes of the disease are in some cases assigned, and it is believed if they are carefully avoided and the remedies promptly and faithfully applied, the losses from disease and death would in a great degree be prevented, and the profits arising from their fleeces and young materially increased. As the remedies are simple and the ingredients composing the prescription within the reach of every farmer it is to be hoped that every good grower who has the misfortune to have a diseased flock will give them a thorough trial.

FEVER.—Fever in sheep is an inflamed state of the blood, disordering the eyes and mouth, and affecting the whole body, though not visibly. When any of the symptoms of a fever appear, the feet of the sheep should be examined, and if found to be hot, there is no doubt of the character of the disease. Other diseases will produce an inflamation of the eyes and mouth; but hot feet are an infallible symptom of fever. This disease is often fatal in itself, and frequently induces others which are equally so. The cause is generally a cold. When only two or three of the flock are affected by it, the case is less desperate; but when many are attacked with it, it is more fatal.

The remedy is to keep the sheep in warmer and more sheltered places, bleed and give the following medicine. Heat a quart of ale, and dissolve in it an ounce of mithridate—add half an ounce of Virginia snake-root, and one dram of cochineal in powder. This quantity serves for four doses, and one of them is to be given morning and evening. If the sheep is bound in its body, an ounce of lenitive electuary is to be mixed with each dose; but if looser than ordinary it ought not to be checked as it will contribute to the cure.

PURGING.—Leave nature to her course when a purging comes on with a fever; but when the fever is abated it should be stopped; and the same remedy that answers for this purpose, may be adopted for such purgings as come on of themselves. Boil a quarter of a pound of raspings of logwood in two quarts of water, till but a quart is left, and when it is nearly boiled down put in a stick of cinnamon, strain it off, and give the sheep a quarter of a pint, four times a day, till the purging ceases.

If this does not produce the desired result, the following addition will render it sure of success. To every dose add a quarter of an ounce of disascordium without honey, and ten grains of Japan earth powdered, and give the doses only morning and evening.

TAG.—The tag is an external disease, owing to the complaint last named. It is a distemper of the tail beginning with filth and foulness, and ending in ulceration. The tag is situated in the inner part of the tail—it consists of scabs and sores, very painful and wasting to the animal, and is owing to the fouling this part by a purging. That tag is worst which follows a fever, because the inflamed state of the blood tends to increase the disorder, and when it begins, during the continuance of the disease, the matter of the fever may chance to settle it there. Two things are to be done; the first is to stop the purging; and the other, to clean the tail.

The last mentioned remedy, either in its weaker or stronger form, is to be used to stop the purging; and the tail being clipped, and the sore part laid bare, first wash it with milk and water blood warm, and then with lime water. After this turn the sheep into a clean dry pasture. Two days after look at it again, and, if not well, repeat the washing, and anoint it with grease and tar mixed together. Twice doing of this is generally sufficient to complete the cure.

DISEASES OF THE LUNGS.—Sheep are subject to be diseased in the lungs, which is easily perceived by their breathing, or by their coughing. Nothing requires a more speedy remedy; for they grow incurable, when it is neglected but a short time, and die as men in the consumption. Change of their pasture is essential to the cure—without it no remedy is effectual. It is owing to cold, and generally attacks sheep that have been kept on low grounds in wet weather.

When any of the flock exhibit symptoms of diseased lungs, drive them into an enclosed pasture where there is short grass and a gravelly soil; and where there is a spring or other running water. Bruise a basket full of the leaves of colt's foot, and press out the juice. Bruise a quantity of plaintain leaves and roots together, and press out the juice. Mix these, and bruise as much garlic as will yield about a fourth part as much juice as one of the others. Mix all together, and add to them a pound of honey, an ounce of aniseeds, and an ounce and a half of elecampane. Give a quarter of a pint of this warm, to every sheep that is affected, once in a day, and it will by degrees make a perfect cure.

JAUNDICE.—Sheep are more subject than any other animals to obstructions of the liver. When this is the case it is seen in a yellowness of the eyes, and a tinct of the same kind in the skin. Farmers in some places, call this the choler, or, in their language, the color.

When sheep are attacked with jaundice they should be put into an open pasture, and kept in moderate motion, but not fatigued. Boil in four gallons of water two pounds of fennel roots, the same quantity of parsley roots, and twice as much roots of couch grass, all cut small. When the water is very strong of them, and there is about half the quantity left, strain it off, by pressing it hard. Bruise as much great celandine as will yield three pints of juice, add this to the liquor, and put in three drams of salt of steel. Mix all together, and every day heat so much of it as will serve to give every sheep that is ill, a gill and a half for a dose. This with the forementioned directions, rarely fails of a cure.

STOPPAGES IN THE THROAT.—Sheep affected with stoppages in the throat, wheeze and breathe with difficulty. It is commonly occasioned by bad pasturage and colds. The remedy is to put them on higher ground, keep them warm and

give them the following medicine. Bruise a good quantity of pennyroyal, and squeeze out the juice. Put to a quart of it a pound of honey, and half a pint of sharp vinegar. Give half a pint of this, blood warm, every night.

Sturdiness.—This is a giddiness in the head. It is owing principally to rich feeding. The remedy is as follows:

Bleed profusely and give the following medicine: Bruise some roots of wild valerian, squeeze out the juice, heat it, and give a quarter of a pint. Repeat the dose every four hours. When the sheep is recovered, turn it upon the common or into some barren hilly pasture. It will be kept from relapses by having but little food, and that perfectly wholesome. If the disease returns it is commonly fatal.

Wood Evil.—This disorder is a kind of cramp. It seizes the legs and will often attack a whole flock at once. The cause is cold and wet. Laying under the drip of trees in raining seasons has often occasioned it, and hence its name.

In order to effect a cure the sheep must be removed to a dry pasture, and then proper remedies may take effect. The following medicine is recommended. Boil in a large quantity of ale as much common cinquefoil and hedge mustard as can be well stirred into it. When the liquor is very strong, strain it off, and add a pint of the juice of valerian root to every gallon. Give half a pint of this morning and evening. Boil in vinegar a large quantity of the leaves of hedge mustard, and with the liquor hot rub the legs.

Staggers.—Sheep as well as horses are sometimes afflicted with the staggers. It is occasioned by improper food. Oak leaves and buds are particularly prejudicial. They bind the bowels and staggers frequently follow. The symptoms are the same as in sturdiness, but more violent; and there is generally a trembling, at the same time, in all the limbs.

To cure this disorder, dissolve an ounce of assafœtida in two quarts of water. Give a quarter of a pint, warm, every three hours. It commonly opens the bowels at the same time that it takes immediate effect on the nervous system, and thus performs a cure. When the sheep have recoved, let them be kept out of the way of a return to the same food, and they will be in no danger of a relapse.

Scab.—This is a disorder to which sheep are very liable. When they are kept in dry wholesome pastures, they are but seldom afflicted with the scab; but when they are on low wet grounds, or get under the drippings of trees in bad seasons they are frequently affected by it, in the severest manner. The symptoms are scurfy skins, which in a little time rise to scabs—the wool grows loose and the sheep pine and become lean.

If they are attacked in a seasen when they can be sheared, it should be immediately done, as nothing is so sure to effect a cure. If the season will not admit of shearing, they must be washed with soap suds, made very strong, and used warm with a piece of flannel or a brush. After this, they must be turned loose into a clean pasture and driven up again as soon as well dried, and the sore parts of the skin must be well wetted with lime water. The scurfy part of the skin must be regarded; and the doing this three times, at two days distance each, will generally effect a cure. But if it fail, the parts that have been thus washed and cleaned, must be anointed with a mixture of equal parts of tar and grease, and they will soon be perfectly well. No inward medicines are required, for the complaint is only of the skin.

Red Water.—This is an inflamation of the skin that often raises it into blisters, in which are contained a sharp humor, thin, watery and colored with blood. Nothing should be done to strike it in, but the cure must be affected by correcting the bad state of the blood. Sheep afflicted with it should be separated from the flock, otherwise it will be very apt to spread through the whole. They should also be put into a pasture where the grass is sweet and where they can have access to good water.

Mix half an ounce of sulphur with an ounce of honey; work it well together, and then divide it into two parts. Dissolve one of those in half a pint of juice of nettles, and give it every day for a fortnight. Slit the blisters when they are full of this watery humor, and having let the matter out, wet the place with juice of wormwood. After four days of this course, bleed them; and then continue the same method till they are well.

Foot Worm.—Sheep are liable to breed worms between their feet; principally, however, when they are kept in wet pastures. It is very painful to them, and will make them pine away. It is perceived by their frequent holding up one foot; and by setting it tenderly down.

Let the foot be washed clean, particularly between the toes, and there will be found a little lump like a tuft of hair. This is the head of the worm. It is to be taken out with care, for it is of a tender substance, and if it be broke in the foot, it will occasion inflamation. The best method is to open the flesh on each side of it, and then, by means of a pair of knippers, to take it out. Dress the wound with tar and grease melted together in equal quantities, and turn the sheep loose. It is better to put it into a fresh pasture; for if the same disorder returns, it is generally worse.

Wild Fire.—This is a violent inflammation, not unlike the Saint Anthony's fire, upon the skin in different places; and generally affects the whole flock. Our forefathers used to bury the sheep alive with its feet upwards at the door of the fold, superstitiously believing that it acted as a spell to drive away the disease. The following, however, is a more modern and rational method of cure.

Separate such as are affected with the disease from the flock, bleed, and prepare the following external remedy. Bruise the leaves of wild chervil, and add to them as much lime water as will make the whole very soft. When it is beat up together, add as much powder of fenugreek seed as will reduce it to pap; then put it into a pan, and set it in a cool place. Rub the inflamed part carefully with this every evening, and make as much lie on as can be kept there; it will take effect during the time of rest, and is to be repeated as long as there is occasion.

Disorders of the Eyes.—Sheep are often affected with colds falling upon their eyes, and almost blinding them; and, at other times, the same accident, even without any visible cause. The remedy in either case is the same. Press out the juice of great celandine, and drop a quantity of it into the eyes night and morning.

Dropsy.—Sheep are often swelled with water in their bellies; and this, if not regarded in time, is certain death. There are two ways in which it is lodged; the one is between the outward flesh and the rim—the other within the rim. In the first case the cure is easy; in the other, nothing can be done.

The method in the first case, is by a coarse kind of tapping. An opening is to be made in the flesh, and a quill thrust in. This will give the water a free passage out, and the wound heals itself. But when the sheep is emaciated, nature will not have strength to heal it; and the sheep must be examined daily, and the wound dressed with tar and grease. It must also be put into a fresh, dry and wholesome pasture, and then disposed of as soon as recruited; for this is a disorder that never fails to return upon any mismanagement in keeping.

The Rot.—This is the most destructive disease to which sheep are subject. Like the murrain it is contagious, and generally spreads through the whole flock, and often over the neighboring country. Flocks that are fed upon open commons are more subject to it than such as have shelter, and are taken care of at night. It frequently prevails in cold seasons, and when dribbling rains come on soon after shearing. Want of food will also occasion this disease; as will likewise the eating of such grass as is full of unwholsome plants. These are among the causes of this fatal distemper; but the worst and most common is infection. Keep sheep out of the way of these causes of the rot, and the same care will preserve them from most other disorders to which they are liable; damp grounds are always dangerous, and especially in wet seasons.

When a sheep is infected with the rot, the white of the eyes looks dull, and they have a faint aspect—the animal is feeble and his skin is foul—the wool comes off in handfuls with the least touch, and the gums look pale and the teeth foul. He will also be dull and listless in motion and heavy, as if his legs were not able to carry him. Many are generally infected at a time, and the first care must be to remove them from the sound ones, and put them in a close fold. They must have but little water, and their food must be dry hay and oats. Bleeding is destructive in the rot. The fact that sheep fed in salt marshes never have the rot, suggested salt as a remedy. It is a good preventive but not an infallible cure. Though the farmer cannot rely upon it, yet among other remedies, it is highly useful.

The following remedies and treatment have often effected cures. Bruise an ounce of the grains of paradise, and four ounces of juniper berries dried; add to these four pounds of bay salt and half a pound of loaf sugar, grind them well together, and sprinkle some of this upon the hay and oats that are given the sheep. Let this be continued three days, and look from time to time to the eyes, and examine every other way to see whether they mend or grow worse. If there be signs of amendment, let the same course be continued; if not, the following must be used. Steep four pounds of antimony in two gallons of ale, for a week—then give the sheep this every night and morning, a quarter of a pint at a time. Boil a pound of the roots of avens, and two pounds of the roots of master-wort, in two gallons of water, till there is not more than six quarts remaining—strain this off, and press it hard, then pour a pint of it into a pail full of water that is to be given to the sheep for their drink.

By these means, carefully managed, and under a good regulation in cleanness, dryness and warmth, the rot will often be cured. This is all that can be promised—for there are times when the disease is so rooted, and when the temperature of the air so favors it, that nothing will get the better of it. If the sheep have a distaste to their food, because of the salt and other ingredients mixed among it, they must be omitted for two or three feedings, and then given in less quantity.—*Silk Culturist.*

From the Philadelphia Inquirer.

To the Farmers of the United States.

That care and skill have improved fruit trees, vegetables, and our domestic animals, are facts known to all classes of husbandmen; and the advantage of rearing cattle from the best breeds is now well understood all over America. The advantages that accompany procuring the best grain for seed are as yet but partially understood, and very little attended to.

Repeatedly sowing some kinds of grain on the same land is, in many cases, followed by an evident decline in the quality; still this, it must be observed, is not a uniform consequence; there are many and well authenticated instances where the change to a new soil and climate is accompanied with a deterioration, and in others as great an improvement has taken place.

As it is known that grains, &c. in some climates and soils, degenerate to a minimum, sometimes in quality, in others in quantity, and frequently in both, a practice calculated to remedy these disadvantages is of great importance to the agriculture of the United States. On the present occasion, it is our object to point out what may be done, hereby showing what is done in other countries, and under circumstances far less favorable to the husbandman, or to the operations of husbandry, than in America. In Scotland, for example, the climate is cold, wet, and stormy; yet, by care and industry, crops are produced remarkable for quantity and quality. There the greatest attention is paid to the changing of seed. The low countries procure their seed potatoes from the high districts at great expense of money and labor. The whole out crop

of some districts is bought, and sowed for seed: this is the case with a portion of country called Blainsley, that lies south of Soutria Hills.

In no country has the culture of clover been more beneficial, or attended with better success, than in Scotland, yet the climate is so unfavorable to the ripening of cloverseed that nearly the whole has to be procured from England or Holland. The farmers of that country frequently change the wheat seed, and procure the best that is to be had, paying very little respect to price, and the greatest attention to quality.

It would appear that the principle by which the Scotch farmers are guided to the results they obtain, is, to select their seed from those districts where it is grown in the greatest perfection, from the climate and soil being best adapted to the plant. Thus they choose seed oats and potatoes of their own growing, these being plants best adapted to mountainous, cool, and moist regions; and clover and wheat seed from England and Holland, which are comparative low, warm and dry, and better adapted to their production.

It is well known that, in America, our oats are not good, they have little kernel or meal; and the quality of our barley is not what it ought to be.

It is to the following circumstance the present address owes its existence:

In the year 1833, a well informed practicable farmer visited Pennsylvania with the object of seeing as much of our practice of farming, soil, and climate, as a short stay here would permit. On his return to Scotland, he procured and sent to his friends in Philadelphia some Angus oats, Hopeton oats, barley, wheat, and rye grass; the cask containing the seed miscarried, and did not arrive here until the fall of 1835.

Some of each kind of those seeds have been sown here; the wheat came up very thin; it is presumed the seed suffered from the long voyage. On the 18th of April, 1836, the oats and barley were sown on rather poor but fresh loam. It is true, the season has been cool, damp, and unfavorable to these grains, still their success has surpassed any thing that could have been calculated on. The barley and both kinds of oats are of superior growth in strength of stem, as well as thickness on the ground; they would lose nothing in a comparison with the crops of oats or barley of any country, and are likely to suffer loss from excessive growth, causing them to lodge. One kind of the oats commenced shooting into ear about the 1st of July, and the other about the 10th; the marks which were placed to distinguish the one from the other have got displaced, and this accident prevents knowing whether it is the Angus or Hopeton oats that first put out the ear.

Now let us inquire into the economy of farmers adopting the practice of annually supplying themselves with new seed grain, and found our calculations on a farm where about twenty bushels of oats are sown each year; the farmer of such a piece of land could supply himself with an annual change of his oat seed in the following manner. It is presumed that each bushel of the imported oats be sown will produce ten bushels; then, by annually buying two bushels, their produce would yield the twenty bushels required for sowing on his farm. Suppose the price of the imported oats to be $1 50 cents a bushel, the two would cost $3, and the price of country oats was 50 cents, the two would cost $1. The xpense of changing the seed would be per annum $2. The estimate is not given as a matter of accuracy, but as a formula by which every one can make his own calcuations.

In procuring a change of seed, there are other points necessary to be attended to besides the quality of the grain, and one of these is to guard against bringing with it the weeds incident to the country or field where it has grown; for want of attention to this, there are farmers who have introduced into their fields, along with the clover they sowed, the narrow-leafed plaintain, which arrogates to itself a place which would otherwise be occupied with clover, to the detriment of his hay, both in quality and quantity, and that more serious curse, the Bensalem clover or white daisy; all this is the result of their not taking sufficient care in the selection of their clover seed.

In the British Islands, their oat and barley fields at some seasons are entirely yellow; nothing is to be seen save the bloom of the wild mustard in some districts called Scholdries; and this is not the only one of this class of yellow flowering spring weed; in wheat they have what is here called cockle, the seed of which is detrimental to superfine flour. All these should be guarded against by the European agent; and, to prevent mischief, the seed, after it arrives here, should be resified in a sieve that will separate the weeds from the pure grain, always collecting and burning the obnoxious seeds.

In proof of the sincerity that the writer entertains a favorable opinion of this system, he will import, the next season's sowing, one hundred bushels of selected barley, one hundred of each variety of oats, already spoken of, and, it being too late for receiving wheat for the ensuing sowing, measures will be taken for bringing to this country wheat for the following year.

Such persons as take an interest in renewing their seed grain are invited to apply to the subscriber, who will furnish them with any quantity not less than a bushel. The cost will be governed by the price abroad, and the expense of bringing the article here. The transaction will be attended with considerable trouble, and the limited extent of the operation will satisfy all who reflect that there are other motives for undertaking the business than that of making money.

Letters, post paid, will be duly attended to, addressed to JAMES RONALDSON,
No. 200, South Ninth street, Philadelphia.

Mulberry Layers.

Our valuable correspondent has again addressed us on the subject of the Chinese Mulberry, and given us further experiments made the present year, having both the Manilla and Cotton Multicaulis; the latter has peculiar claim to the distinctive name of *Multicaulis*, as it furnishes more stocks than any mulberry we have seen; the leaves are of great size, thickness and weight, and equal if not superior to any other kind—says his mulberries are in a tolerable condition, considering the unfavorable season—having had two smart frosts the latter part of May, which both times killed the tender shoots,—but they all sprouted again, and probably more than if they had not been cut down by the frost, and now, in the month of August have had two more slight frosts without doing any injury.

The Manilla are two weeks behind the Canton owing to their being set out the present year. The Chinese were not removed from their last year's situation—the roots have given branches in great number and from some have 5, 10, 20, 30, 40 and 50 layers form a single root of the Canton.

The frosts in May, nearly annihilated the slips or cuttings, by killing the bud, and prevented new shoots—the sudden change in the atmosphere took place in the night and prevented the opportunity of protection—the dew upon the vegetables congealed to ice, and land which had been ploughed, was so frozen as to bear a man without breaking the crust. What could stand before such a frost in the month of May?

In laying down Mulberries, it is noticed, that if the hook be placed on any part of the shoot which is tender, the shoot will perish from the hook to the tip or nearly so. The reason I suppose is that the elasticity of the stalk causes it to press so hard upon the hook, as partially or wholly, to interrupt the circulation of the sap, and of course the stalk will perish. The way to do the thing as it should be done, is to place the hook where the wood is formed or hardened, a little earth drawn over the tip end and a pebble or some small weight laid thereon, to prevent rising up; and when the buds have started up about an inch, draw a little earth over the stalk.

The Manilla Multicaulis, on account of its tenderness, is peculiarly liable to suffer by the hook, in laying down—a few of the Chinese Canton suffered in this way, because the hook was placed upon the tender or watery parts of the stalk. There is one way to avoid this difficulty, by suffering the buds to start before laying down, then carefully placing the hook where the wood has some hardness, (if any hook is needed) and covering the stalk slightly with earth. In this case, the only good effected by the hook, is to keep the stalk in place steady, that the root may form.—*Silk Cabinet.*

Euphobia Phosphorescens.

This remarkable shrub, which grows on the rivers in Brazil in South America, is said to possess the singular property of spontaneous combustion. A very interesting paper on the subject was lately read before the London Linnæan Society, by Mr. Mornay, who has witnessed its ignition. He says, "when this Euphobia forms large entangled impenetrable masses, covering perhaps a quarter of an acre of ground, and growing some twenty feet high, it will take fire spontaneously, emitting, for some time, a vast column of dense black smoke, and at last bursting out into flames. Whenever the author had an opportunity of observing the combustion of the juice of this plant, on its coming in contact with atmospheric air, the temperature was a very little raised; the combustion (with flame) went on at a low temperature, until stopped by the formation of a crust, which quickly takes place. The temperature always appears to be too low to spread into a conflagration."—*Silk Cult.*

Sugar from Indian Corn.

M. Pallis lately presented to the Academie des Science of Paris, a sample of this substance, extracted from the stem of the plant, which has been found to contain nearly six per cent. of sirup boiled to forty degrees, a part of which will not crystalize before fructification; but it condenses and acquires more consistency from that period to the state of complete maturity. The most favorable time to obthin the greatest quantity of sugar is immediately after the maturity and gathering of the fruit. The litter left after the extraction of sugar is capital to feed cattle or to make packing paper.

Imported Bull for Sale.

TO be sold, a full blooded Bull of the Devonshire breed, imported in June last by the owner; he is admitted by all who have examined him, to be a very superior animal, and is from the stock of F. Quarterly Esq., who is celebrated for his breed of Devonshire cattle. Apply personally, (or if by letter post paid.) to Mr. J. COWLEN, Cardiff town of La Fayette, near Syracuse, county of Onondaga, state of New York. oct 29-12

20,000 GENUINE Morus multicaulis, or Chinese Mulberrry, of one and two years' growth, by the dozen, hundred or thousand.

Also—30,000 White *Mul*berry, of one and two years' growth—for sale by ASA ROWE.

ELECTION NOTICE.—*Sheriff's Office, Monroe County, Rochester, July* 23, 1836.—A general election is to be held in the county of Monroe, on the 7th, 8th and 9th days of November next, at which will be chosen the officers mentioned in the notice from the Secretary of State, of which a copy is annexed. ELIAS POND, Sheriff.

State of New-York, Secretary's Office, Albany, July 15, 1836.

Sir—I hereby give you notice that at the next general election of this state, to be held on the 7th 8th and 9th days of November next, a Governor and Lieutenant Governor are to be elected.

I also give you notice that a Senator is to be chosen in the Eighth Senate District in the place of John Griffin, whose term of office will expire on the last day of December next.

JOHN A. DIX, Secretary of State.

To the Sheriff of the county of Monroe.

N. B.—The Inspectors of Election in the several towns in your county will give notice of the election of a Representative to Congress from the 28th Congressional District, and that 42 Electors of President and Vice President are also to be chosen at the general election aforesaid. They will also give notice of the election of Members of Assembly, and for filling any vacancies in county offices, which may exist. july26

From Pouillett's Elements of Meteorology.

Meteorology.

Climates are characterized, in so far as they depend upon heat, both by the mean temperature of the year, and the variations of temperature which are experienced daily, monthly, or according to the different seasons of the year. Thus we may say that the climate is *burning* in the torrid zone; *warm* in the zone of 77 to 68°; *pleasant* in the zone of 68 to 59°; *temperate* in the zone of 59 to 50°; *cold* in the zone of 50 to 41°; *very cold* in the zone of 41 to 32°, and *icy* in the zone whose mean temperature is below 32°. But the climates which belong to the same zone, or to the same Isothermal line, must be distinguished from each other, and we propose to call *constant climates*, those which exhibit no great difference throughout the year, between the extremes of heat and cold; *variable climates*, those in which there is a greater difference; and, with Buffon and Humboldt, *excessive climates*, those in which the difference is very great. The following table presents an example of this distinction:

Names of Places.	Mean temperature.	Mean temp. of warmest month.	Mean temp. of coldest month.	Difference.
Funchal,.....	68°54	75°76	62°96	12°80
.....	.....	.....	.....	.....
St. Malo,.....	54.14	66.92	41.72	25.20
Paris,.....	51.08	65.30	36.14	29.16
London,.....	50.36	64.40	37.76	26.64
.....	.....	.....	.....	.....
New York,.....	53.78	80.78	25.34	55.44
Pekin,.....	54.86	84.38	24.62	59.76

Funchal has a *constant climate.* We shall have occasion to remark, that this is almost always a characteristic of islands.

St. Malo, Paris and London are examples of *variable climates*, while New York and Pekin evidently have *excessive climates.*

A moment's reflection upon the prodigious influence that heat and cold exercise over all organized beings, will suffice to convince us that, with equal mean temperatures, the productions cannot be the same in excessive climates and in those which are constant or variable.

It is not only by these marked distinctions that climates may be characterized; if it requires only a few additional degrees of cold to kill plants, and a few additional degrees of heat to ripen fruits, it is evident also that the epoch and duration of the great heats and colds are also elements indispensable to the knowledge of climates. Thus, observers should not only seek to determine the mean temperatures of the year, and the mean temperatures of the warmest and coldest months; but they should strive to ascertain the distribution of heat throughout the whole course of the year, and for this purpose daily observations are necessary. These observations having been properly made, it only remains to combine them, in order to obtain the mean temperature of days, months and seasons.

We cannot close this section without quoting from M. Arago, (*Annuaire du Bureau des Longitudes*, 1825,) the extremes of heat and cold which have been observed at the Observatory of Paris, and the highest temperatures of the air which have been observed in different climates.

Maximum of Heat.

Years.	Months.	Temp.
1706,.....	8th August,.....	95°54
1753,.....	7th July,.....	96.08
1754,.....	14th July,.....	95.00
1755,.....	14th July,.....	94.46
1793,.....	8th July,.....	101.12
1793,.....	16th July,.....	99.14
1800,.....	18th August,.....	95.90
1802,.....	8th August,.....	97.52
1803,.....	8th August,.....	98.06
1808,.....	15th July,.....	96.16
1818,.....	24th July,.....	94.10

Maximum of Cold.

1709,.....	13th January,....	-9°58
1816,.....	13th do.	-1.66
1729,.....	13th do.	4.46
1742,.....	10th do.	1.40
1748,.....	10th do.	4.46
1754,.....	8th do.	6.62
1755,.....	8th do.	3.92
1767,.....	8th do.	4.46
1768.....	8th do.	1.22
1771,.....	8th do.	7.52
1776,.....	29th do.	-2.38
1783,.....	30th December,..	-2.38
1788,.....	31st December,..	-8.14
1795,.....	25th January,....	-10.30
1798,.....	26th December,..	0.32
1820,.....	11th January,....	6.26
1823,.....	14th January,....	5.90

Table of the Highest Tempertures of the Air, observed in different climates.

Names of Places.	Maximum of heat.	Observers.
Equator,.....	101°12	Humboldt.
Surinam,.....	90.14	
Oasis of Mourzouk,.....	129.2[illegible]	Ritchie & Lyon.
Pondicherry,.....	112.46	Le Gentil.
Madras,.....	104.00	Roxburgh.
Beit-el-Fakih,.....	100.58	Niebuhr.
Martinico,.....	95.00	Chauvalon.
Manilla,.....	110.66	Le Gantil.
Antougil, (Madagascar.)	113.00	Do.
Gaudaloupe,.....	101.12	Le Gaux.
Vera Cruz,.....	96.08	Orta.
Isle of France,.....	90.68	Cossigny.
Philae, (Egypt,).....	109.58	Contelle.
Cairo,.....	194.36	Do.
Bassora,.....	113.54	Beauchamp.
Paramatta, (N.Holland,)	105.98	Gen. Brisbane.
Cape of Good Hope,...	110.66	La Caille.
Vienna,.....	96.62	Broquin.
Strasburgh,.....	96.62	Herenschneider.
Paris,.....	101.12	
Warsaw,.....	92.84	Deljue.
Franecker, (Holland,)..	93.20	Van Swinden.
Copenhagen,.....	92.66	Bugge.
Nain, (Labrador,).....	82.04	Latrobe.
Stockholm,.....	93.92	Ronnoss.
Petersburgh,.....	87.08	Euler.
Abo,.....	93.56	Leche.
Eyafjord, (Iceland,)....	69.62	Van Scheels.
Hindoen,(Norway,)....	79.00	Schytte.
Melville Island,.....	60.08	Parry.

"This Farm for Sale,"

Is written in emphatic letters upon the fences of some of the best agricultural homesteads in the western part of New York. And why is it so? Is it because the soil holds out no inducements to its cultivation, or because there is a spirit of discontent and restlessness abroad, which is driving hundreds and thousands to abandon their firesides and the home of their ancestors? One of the greatest secrets of happiness we all so eagerly are in pursuit of, is *contentment.* By which we mean, the absence of a repining disposition, of a querulous and complaining spirit. Perhaps in no section of the United States can be found better soil and more productive farms, than in the western part of New York. The land is susceptible of easy cultivation, and it yields luxurious crops. The climate is healthy, the access to navigable streams and canals and great roads within a short hour's ride, and if contentment is to be had, happiness to be found, it is to be looked for in such situations. Yet people there seem to be dissatisfied with present good, and many of them forget what shadows they are pursuing, and thus it is hundreds, nay thousands of the old and wealthy farmers, are selling off their estates, boxing up their merchandize and leaving home and all its endearments and delightful associations, merely to enhance their wealth by settling in the western wilderness!

"Man never *is*, but always *to be* blest," was as true in the time of the immortal Pope as in our own day. Forever in pursuit of some imaginary good thing, what wretchedness and discontent the mass of men entail upon themselves. Dissatisfied with their present condition, they seek to improve it by change of occupation and residence. And yet how often the very end sought, the pursuit coveted, is the source of immediate misery or future degradation. It is not every dollar we gain which will make us happy, any more than every sigh we utter or tear we shed tends to make us miserable. It is not in realizing the good, so much as in anticipating its approach, that the mind derives pleasure, and after sacrificing what we enjoy most and love the deepest, to a mercenary ambition, how poor and unsatisfying and inadequate to give us comfort and bestow happiness, is the reward.

It is with a view to the ultimate good of the frugal and virtuous population of New England, that we would urge upon them the blessings of *contentment* at home, with its various comforts, rather than the indulgence of illusory hopes of acquiring opulence abroad by a mere change of local situation. Labor, stern and severe, must be indulged elsewhere, as here, and toil there has less to soften its weariness, than among friends and kindred in New England. The beautiful fictions, inwrought with the truth, told of the western world, are suited to please the imagination and beguile the ear. They warp the understanding and do violence to the better judgment. But it is hard to sever the truth from exaggeration, and it is only by painful and irreparable experience, that the scales are lifted from off the eyes of the too credulous believer. "May you die among your kindred," is the beautiful sentiment of the ancients, and it has lost none of its pertinency with us of the present day. We are sensible all expostulation and argument is lost upon those of our friends, who have made up inflexible opinions touching the utility of emigration. But to those who still doubt and falter, we charge them to 'count the cost,' and not abandon comfortable houses and kind friends and endeared circles for mere mercenary good, expecting that the accumulation of sordid gold, will secure here on earth the serenity and enjoyment and happiness of heaven!—*Northampton Courier.*

Sheep.

SAXONY and MERINO BUCKS for sale. Inquire at the City Mills, or at Brighton of Porter Taylor.

Rochester, Oct. 10, 1836. oct 15-f3t

25,000 Mulberry Trees.

WE have 25,000 White Italian Mulberry Trees 3 years old, which we will sell at $25 per 1000, or $3 per 100. If 5000 or upwards are taken, a deduction will be made.

REYNOLDS & BATEHAM,
sept 3 Rochester Seed Store

Monroe Horticultural Garden and Nurseries, Greece, Monroe Co. N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer. oct 1 ASA ROWE.